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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,993	03/08/2001	Jeffrey P. Kubala	POU920000201US1	5841

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EXAMINER	
SIDDIQI, MOHAMMAD A	

ART UNIT	PAPER NUMBER
2154	7

DATE MAILED: 03/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/801,993	KUBALA ET AL.
	Examiner	Art Unit
	Mohammad A Siddiqi	2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 February 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1- 43 are presented for examination.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1-4, 9, 15-18,23, 29-32 , 37and 43, are rejected under 35 U.S.C. 102(e) as being anticipated by Kauffman et al. (6332180) (hereinafter Kauffman).

5. As per claims 1, 15,29, and 43, Kauffman discloses a method in a computing system having a first partition including a first operating system (figure 2, element 208 and 210, col 7, lines 33-41) and a second partition including a second operating system (figure 2, element 208 and 210, col 7, lines 33-41), the method comprising the steps of:

a) conveying first partition throughput information from said first partition to a partition manager (col 4, lines 50-52 and col 7, lines 14-18);

b) creating in said partition manager (figure 2, element 212 and 217, col 4, lines 50-52), resource balancing directives from said resource balancing directives based on said first partition throughput information (col 7, lines 14-18 and col 2, lines 30-42); and

c) allocating resources to said first partition by the partition manager (col 4, lines 50-52) according to the resource balancing directives (col 7, lines 10-28 and col 2, lines 50-59).

6. As per claims 2,16, and 30, Kauffman discloses the partition manager (col 4, lines 50-52 and col 7, lines 14-18) comprises a workload manager running in said second partition (col 8, lines 45-55) and a hypervisor (col 2, lines 38-40).

7. As per claims 3,17, and 31, Kauffman discloses the conveying throughput information (col 2, lines 30-42) between partitions includes inter-partition (col 4, lines 62-63) memory sharing (col 4, lines 65-67).

8. As per claims 4, 18, and 32, Kauffman discloses the conveying throughput information between partitions includes single operation message passing (col 4, lines 65-67, and col 5, lines 1-3).

9. As per clams 9, 23, and 37, Kauffman discloses the network packets are related to first partition (col 34, lines 11-16).

10. As per claims 7, 21, 35, Kauffman teaches the said network packets comprise packet received by a partition (see abstract)

11. As per claims 8, 22, and 36, Kauffman teaches the network packets comprise packets sent by a partition (see abstract).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

13. Claims 5-8,10-14, 19-22,24-28, 33-36, and 38-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kauffman et al. (6332180) (herein after Kauffman) in view of Mayer et al. (6233242) (hereinafter Mayer).

14. As per claims 5, 19, and 33, Kauffman teaches the throughput information (col 2, lines 30-42).

Kauffman fails to expressly teach the information is obtained by a packet activity counter.

However, Mayer discloses the throughput information (col 8, lines 19-21) is obtained by a packet activity counter (col 53, lines 50-58). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use two or more operating system into a single virtual server, called cluster, so they can work together to serve network traffic from the network. If one operating system fails or goes offline, main server automatically detects the problem and redirects the network traffic to remaining operating system.

15. As per claims 6, 20, and 34, Kauffman teaches the throughput information (col 2, lines 30-42).

Kauffman fails to expressly teach the information is obtained by counting network packets related to a partition. However, Mayer discloses the information is obtained by counting network packets related to a partition (col 53, lines 50-58, each partition is executing its own copy of operating system). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use two or more operating system into a single virtual server, called cluster, so they can work together to serve network traffic from the network. If one operating system fails or goes offline, main server automatically detects the problem and redirects the network traffic to remaining operating system.

16. As per claims 10, 24, and 38, Kauffman teaches the throughput information (col 2, lines 30-42).

Kauffman fails to expressly teach the information is obtained by relating network traffic to a processor utilization over a period of time.

However, Mayer discloses information (col 8, lines is obtained by relating network traffic to a processor utilization over a period of time (col 97 and col 98). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use two or more operating system into a single virtual server, called cluster, so they can work together to examine network traffic to and from the server at the packet-level.

17. As per claims 11, 25, and 39, Kauffman fails to expressly teach the network traffic is obtained by counting network packets related to a partition. However, Mayer discloses the network traffic is obtained by counting network packets related to a partition (col 53, lines 50-58). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use two or more operating system into a single virtual server, called cluster, so they can work together to serve network traffic from the network. If one operating system fails or goes offline, main server automatically detects the problem and redirects the network traffic to remaining operating system.

18. As per claims 12, 26, and 40, Kauffman fails to expressly teach the processor utilization is obtained from a system activity counter. However, Mayer discloses the processor utilization is obtained from a system activity counter (col 97,98). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use two or more operating system into a single virtual server, called cluster, so they can work together to examine network traffic to and from the server at the packet-level.

19. As per claims 13, 27, and 41, Kauffman fails to expressly teach the processor utilization is a system activity counter. However, Mayer discloses

the processor utilization is a system activity counter (col 97,98). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use two or more operating system into a single virtual server, called cluster, so they can work together to examine network traffic to and from the server at the packet-level.

20. As per claims 14, 28, and 42, Kauffman fails to disclose a network traffic to a processor utilization is a ratio of number of packets over time. However, Mayer discloses disclose a network traffic to a processor utilization is a ratio of number of packets over time (col 97 and col 98). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use two or more operating system into a single virtual server, called cluster, so they can work together to examine network traffic to and from the server at the packet-level.

Response to Amendment

21. Applicant's arguments filed 02/19/04 have been fully considered but they are not persuasive:

In response to the applicant's argument " Kauffman does not expressly teach or imply any of throughput information; resource

balancing directives; creating resource", the examiner respectfully disagrees. The Kauffman prior art teaches creating partition, portioning application (console program) which is a administrative program (col 7, lines 10-17), console program (console program can be implemented as a "master console") creates partitions (col 8, lines 67-68), conveying throughput information (col 2, lines 35-46), resource balancing (col 7, line 17, and col 2, lines 35-58), allocating resources (col 8, lines 45-50). Therefore, limitations are met by the reference. Claims 1,15,29 and 43 stands rejected.

In response to the applicant's argument " a workload manager", the examiner respectfully disagrees. The Kauffman prior art teaches console program which allocates and administers resources (col 8, lines 45-68 and col 9, lines 1-5). Therefore, limitations are met by the reference. Claims 2,16, and 30 stands rejected.

In response to applicant's argument "the network packets are related to first partition", the examiner respectfully disagrees. The Kauffman prior art teaches packetized data related to first instance (partition) (see abstract). Therefore, limitations are met by the reference. Claims 9, 23, and 37 stands rejected.

22. In response to applicant's argument that the Network Switch is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, network switches are capable of inspecting the data packets as they are received, determining the source and destination device of that packet, and forwarding that packet appropriately, intelligent network switch are capable of monitoring performance of the network fabric.

23. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, since network switches are capable of inspecting the data packets as they are received, determining the source and destination device of that packet, and forwarding that packet appropriately, therefore it would have been obvious

to one of ordinary skill in the art at the time of the invention to use two or more operating system into a single virtual server, called cluster, so they can work together to examine network traffic to and from the server at the packet-level.

Conclusion

24. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad A Siddiqi whose

telephone number is (703) 305-0353. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MAS

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